

CLAIMS

1. A disk changer comprising:
 - a plurality of accommodating units for accommodating disks;
 - 5 a selecting unit that selects an accommodating unit from among the accommodating units;
 - a loading mechanism that loads a disk accommodated in the accommodating unit selected by the selecting unit;
 - a disk processing unit that reproduces data from or records data to the disk loaded by the loading mechanism;
 - 10 and
 - a lock mechanism that locks movement of a disk that is not selected by the selecting unit.
- 15 2. The disk changer according to claim 1, wherein the lock mechanism includes an all-lock position at which movement of all the disks is locked.
3. The disk changer according to claim 1 or 2, wherein
 - 20 the accommodating units are disk trays for holding the disks.
4. A disk changer comprising:
 - a disk accommodating unit that accommodates a
 - 25 plurality of disk trays, each of the disk trays holding one disk;

a disk processing unit that reproduces data from or records data to a loaded disk; and

a loading mechanism that loads a selected disk together with the disk tray from the disk accommodating unit to a position of the disk processing unit, wherein
5 the loading mechanism includes

a tray drawing pinion provided in the disk processing unit;

a disk tray that is accommodated in the disk accommodating unit and includes a tray rack engaged with
10 the tray drawing pinion; and

a rack plate that includes a tray drawing rack engaged with the tray drawing pinion, is extendably attached to the disk tray, draws a tray in at a first half
15 process of the loading, and stops the tray at a second half process of the loading to relay a subsequent drawing to the tray rack.

5. The disk changer according to claim 4, wherein
20 the disk processing unit includes

a stopper that stops the rack plate at a position where the rack plate is drawn in by a predetermined distance; and

a guide groove that guides loading of the rack
25 plate and the disk tray,

a second recess is formed near a rack plate inlet of

the guide groove,

a first recess is formed on the disk tray,

and

the rack plate includes

5 an abutting unit that abuts on the stopper when
the rack plate is drawn in by the predetermined distance;

the tray drawing rack formed from a distal end
portion to a position of the tray drawing pinion when the
abutting unit abuts on the stopper; and

10 a locking unit that engages with the first recess
in a maximum extended state of the rack plate, and is
pushed out of the first recess when the abutting unit abuts
on the stopper and pushed into the second recess to release
engagement with the disk tray.

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6. The disk changer according to claim 4 or 5, wherein
the tray drawing pinion is driven by a motor that
activates a clamp cam in the disk processing unit.

20 7. The disk changer according to any one of claims 4 to 6,
wherein

each of the disk trays is for vertically placing a
disk,

the disk trays are arranged in a radial pattern, and

25 the disk processing unit is rotated around a
predetermined vertical shaft to face a disk tray loaded by

the loading mechanism.